



1018 Thomasville Road
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Tallahassee, FL 32303
850-224-8207
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www.fnai.org

Kelly Beacher
NAI Talcor
1018 Thomasville Road, Suite 200A
Tallahassee FL 32303

May 3, 2019

Dear Ms. Beacher,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: NextEra Proposed Route
Date Received: 04/26/19
Location: Leon & Jefferson County

Based on the information available, this site appears to be located in a significant region of natural areas and habitat for several rare species. Special consideration should be taken to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

Federally Listed Species

Our data indicate federally listed species are present on or very near this site, specifically *Drymarchon couperi*, *Medionidus simpsonianus*, *Pleurobema pyriforme* and *Dryobates borealis* (see enclosed map and tables for details). This statement should not be interpreted as a legal determination of presence or absence of federally listed species on a property.

The element occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

*Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational*



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

Managed Areas

Portions of the site appear to be located within the St. Marks River Preserve State Park, managed by the FL Dept. of Environmental Protection, Div. of Recreation and Parks, within Plank Road State Forest managed by FL Dept. of Agriculture and Consumer Services, Florida Forest Service, Shepherd's Branch Habitat Mitigation Area Conservation Easement managed by City of Tallahassee, Capital Circle Office Complex Conservation Area managed by FL Dept. of Management Services, Div. of Real Estate, Development & Management, Tallahassee-St. Marks Historic Railroad State Trail managed by FL Dept. of Environmental Protection, Div. of Recreation and Parks, Apalachicola National Forest managed by US Dept. of Agriculture, Forest Service, Gil Waters Preserve at Lake Munson managed by Leon County, Lake Talquin State Forest managed by FL Dept. of Agriculture and Consumer Services, Florida Forest Service, and Joe Budd Wildlife Management Area managed by FL Fish and Wildlife Conservation Commission.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

Land Acquisition Projects

This site appears to be located within the Upper St. Marks River Corridor Florida Forever BOT Project, which is part of the State of Florida's Conservation and Recreation Lands land acquisition program. For more information on this Florida Forever Project, contact the Florida Department of Environmental Protection, Division of State Lands.

Florida Forever Board of Trustees (BOT) projects are proposed and acquired through the Florida Department of Environmental Protection, Division of State Lands. The state has no specific land management authority over these lands until they are purchased.

CLIP

The enclosed map shows natural resource conservation priorities based on the Critical Lands and Waters Identification Project. CLIP is based on many of the same natural resource data developed for the Florida Forever Conservation Needs Assessment, but provides an overall picture of conservation priorities across different resource categories, including biodiversity, landscapes, surface waters, and aggregated CLIP priorities (that combine the individual resource categories). CLIP is also based primarily on remote sensed data and is not intended to be the definitive authority on natural resources on a site.

For more information on CLIP, visit <http://www.fnai.org/clip.cfm> .

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

This report is made available at no charge as a public service of the Florida Natural Areas Inventory.

Thank you for your use of FNAI services. An invoice will be mailed separately. If I can be of further assistance, please contact me at (850) 224-8207 or at kbrinegar@fnai.fsu.edu.

Sincerely,

Kerri Brinegar

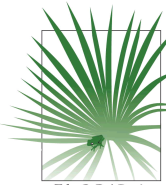
Kerri Brinegar
GIS / Data Services

Encl

NextEra Proposed Route Map 1/7

Site boundaries are approximate.

Leon & Jefferson County



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FLORIDA Natural Areas INVENTORY

Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service
Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

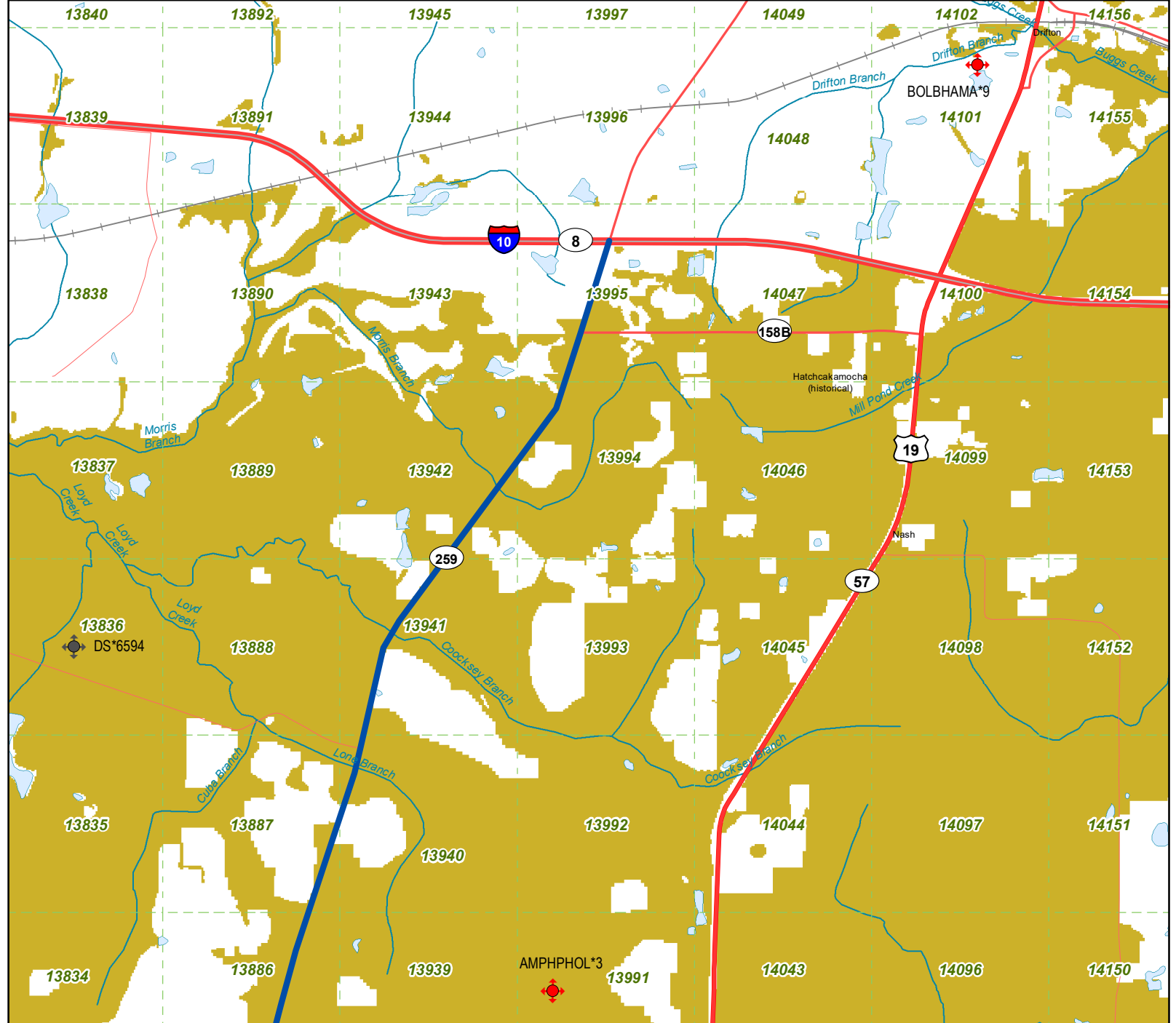
- Florida Forever
- Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE

Map should not be interpreted without accompanying documents.



Map produced by KAB
5/3/2019

NextEra Proposed Route Map 2/7

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Land Acquisition Projects

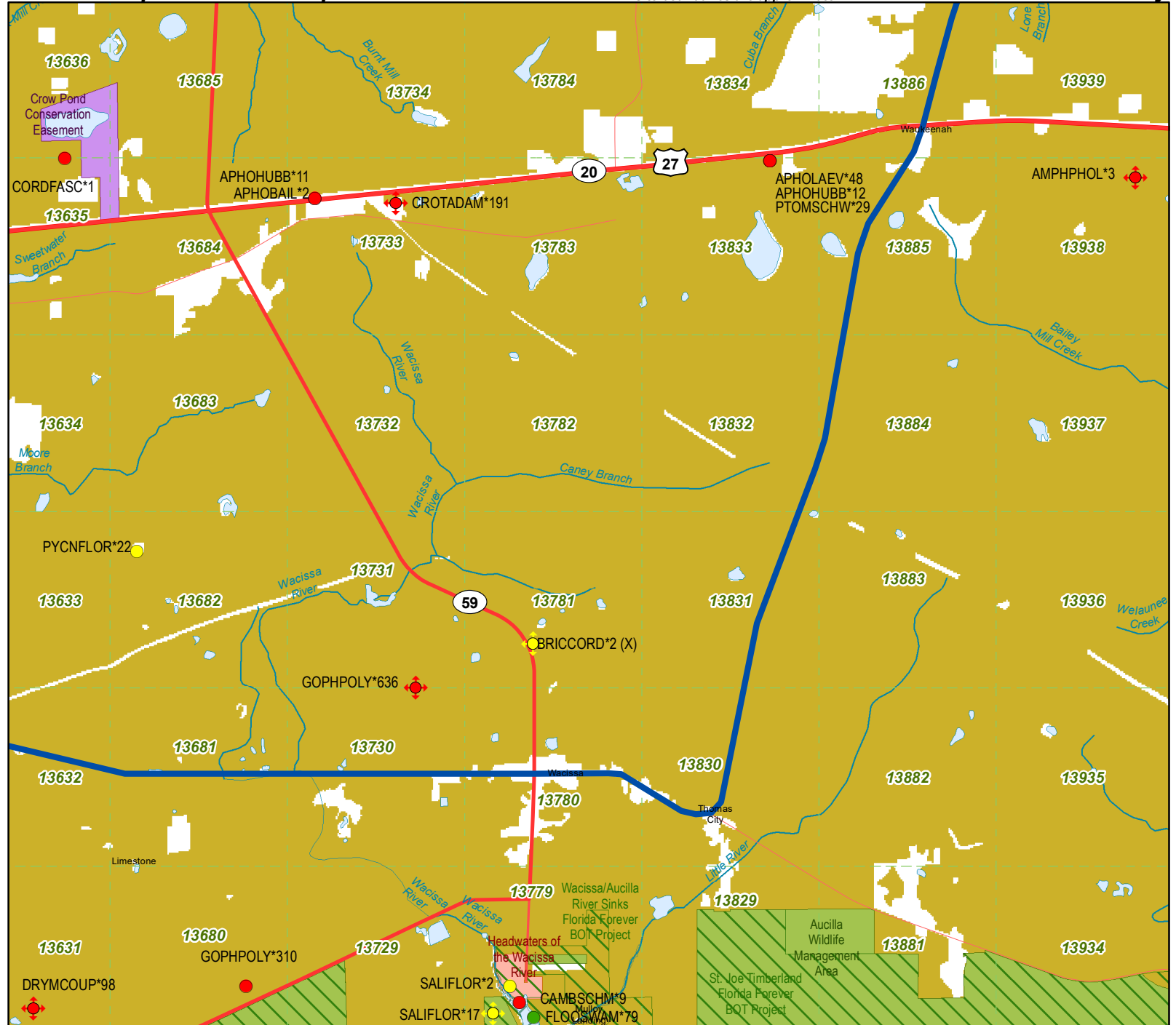
- Florida Forever
- Board of Trustees Projects

- FNAI Rare Species
Habitat
- FNAI Biodiversity Matrix
Square Mile Units

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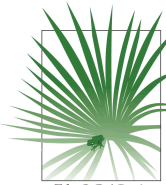
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Miles

Map produced by KAB
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NextEra Proposed Route Map 3/7

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Point Indicates General
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U.S. Fish & Wildlife Service
Scrub Jay Survey 1992-96

Conservation Lands

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Land Acquisition Projects

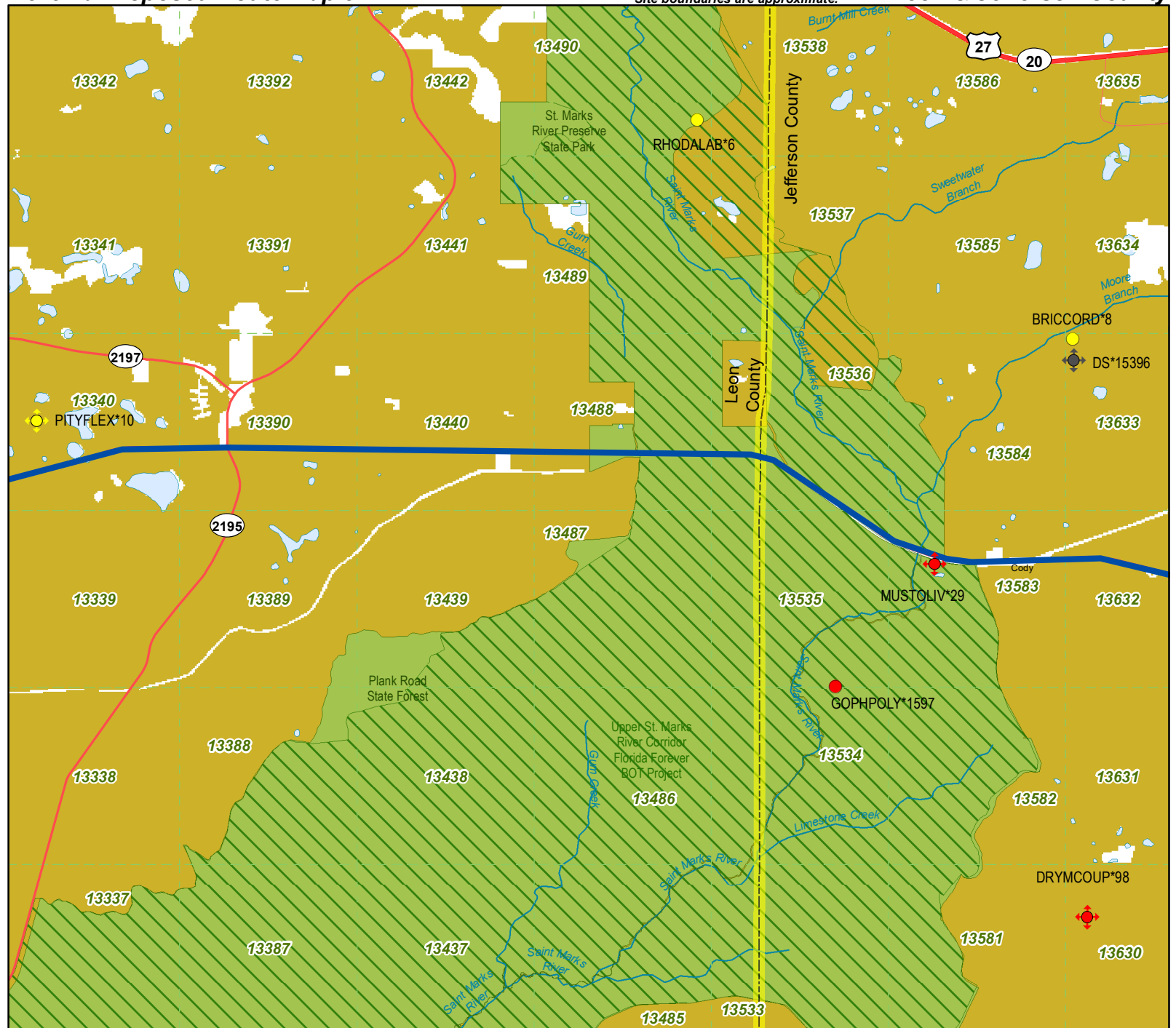
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0 0.5 1 2
Miles

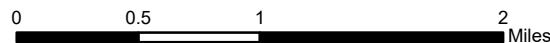
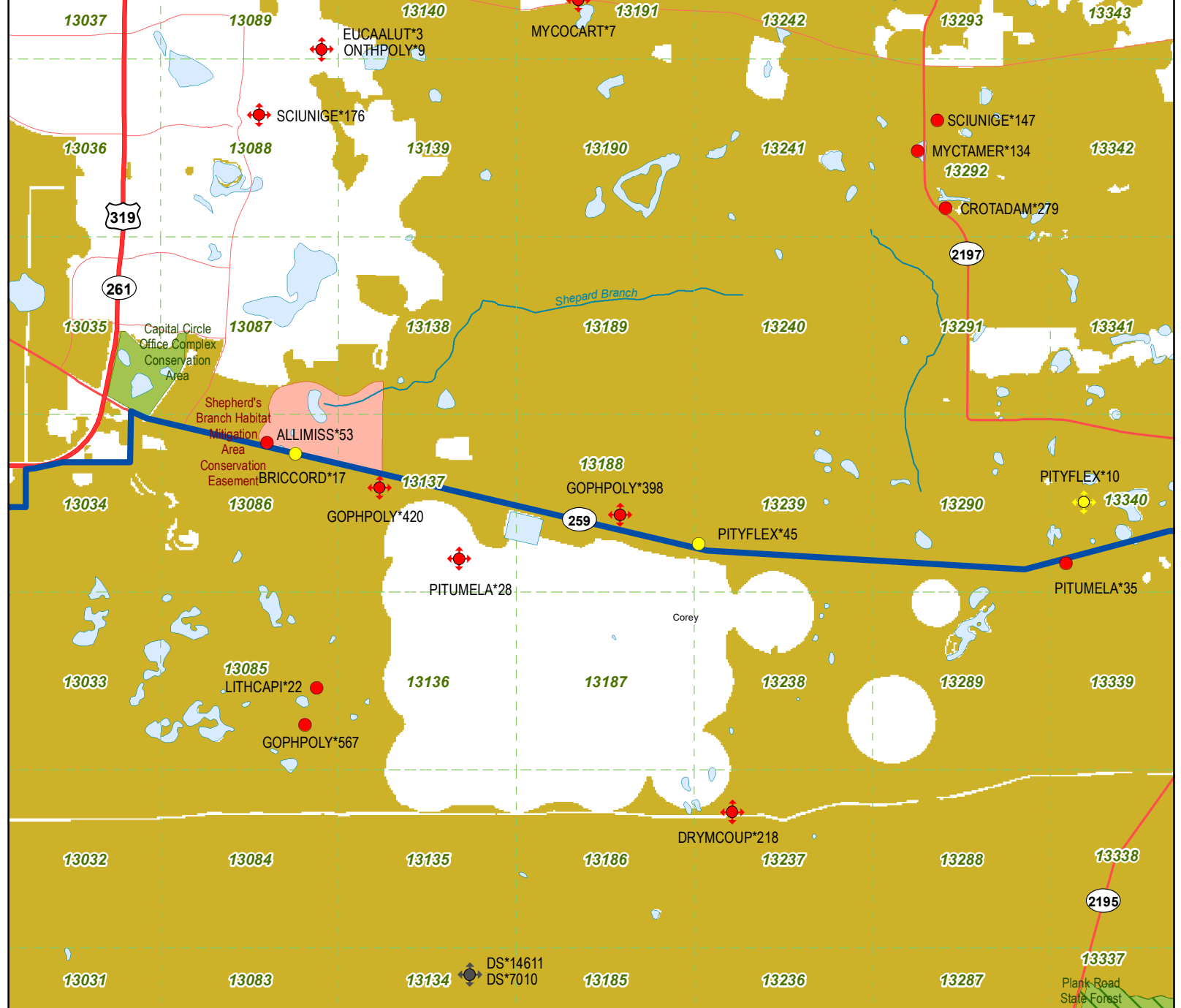
Map produced by KAB
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NextEra Proposed Route Map 4/7

Leon & Jefferson County

Tallahassee

Site boundaries are approximate.



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FLORIDA
Natural Areas
INVENTORY

Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive
- ⬇ Point Indicates General Vicinity of Element
- ➡ U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
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Land Acquisition Projects

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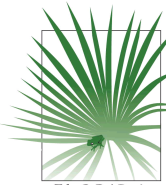
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NOTE

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NextEra Proposed Route Map 5/7

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Element Occurrences

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Point Indicates General
Vicinity of Element



U.S. Fish & Wildlife Service
Scrub Jay Survey 1992-96

Conservation Lands

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Land Acquisition Projects

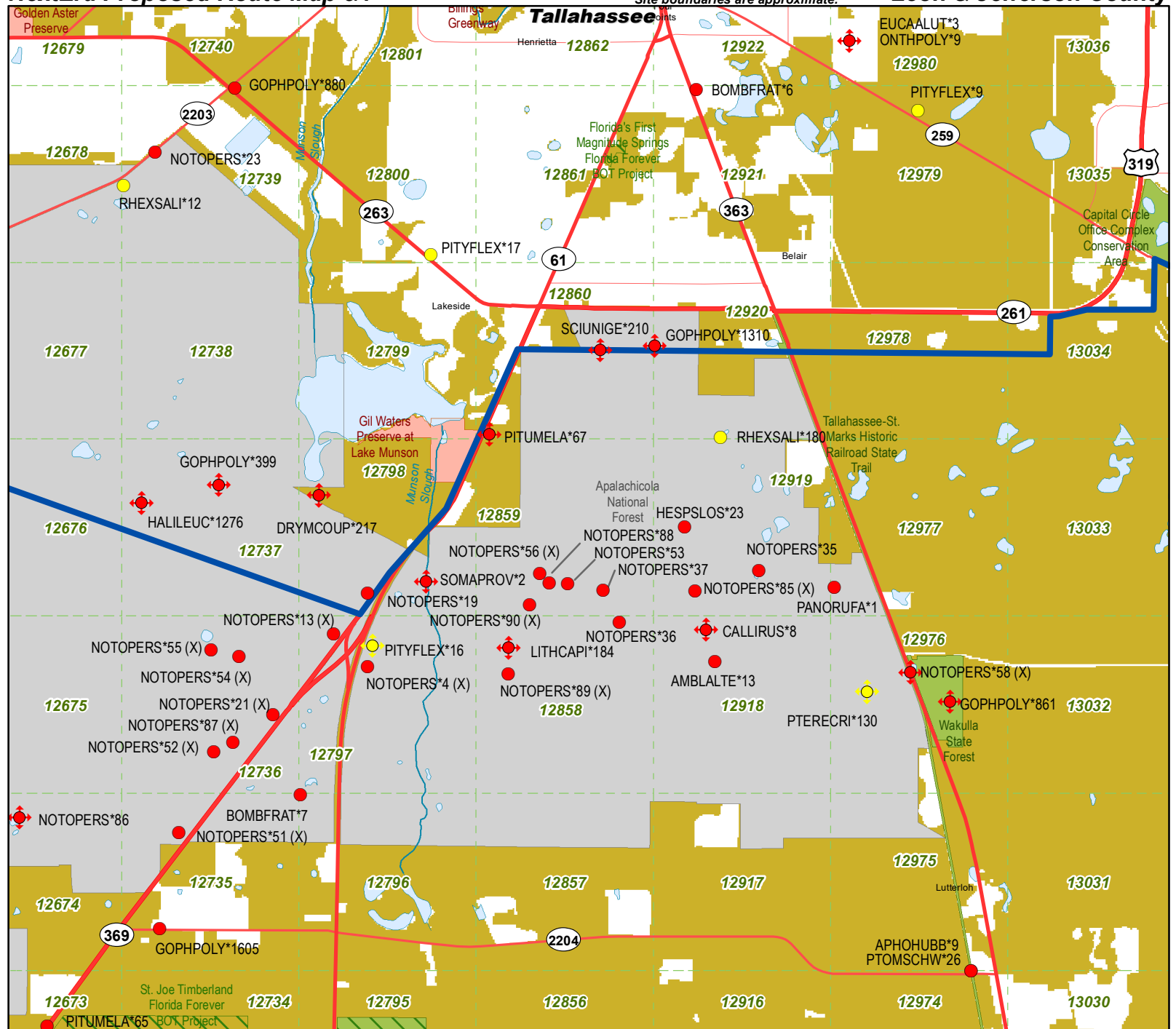
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NextEra Proposed Route Map 6/7

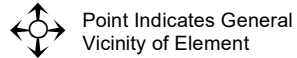
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U.S. Fish & Wildlife Service
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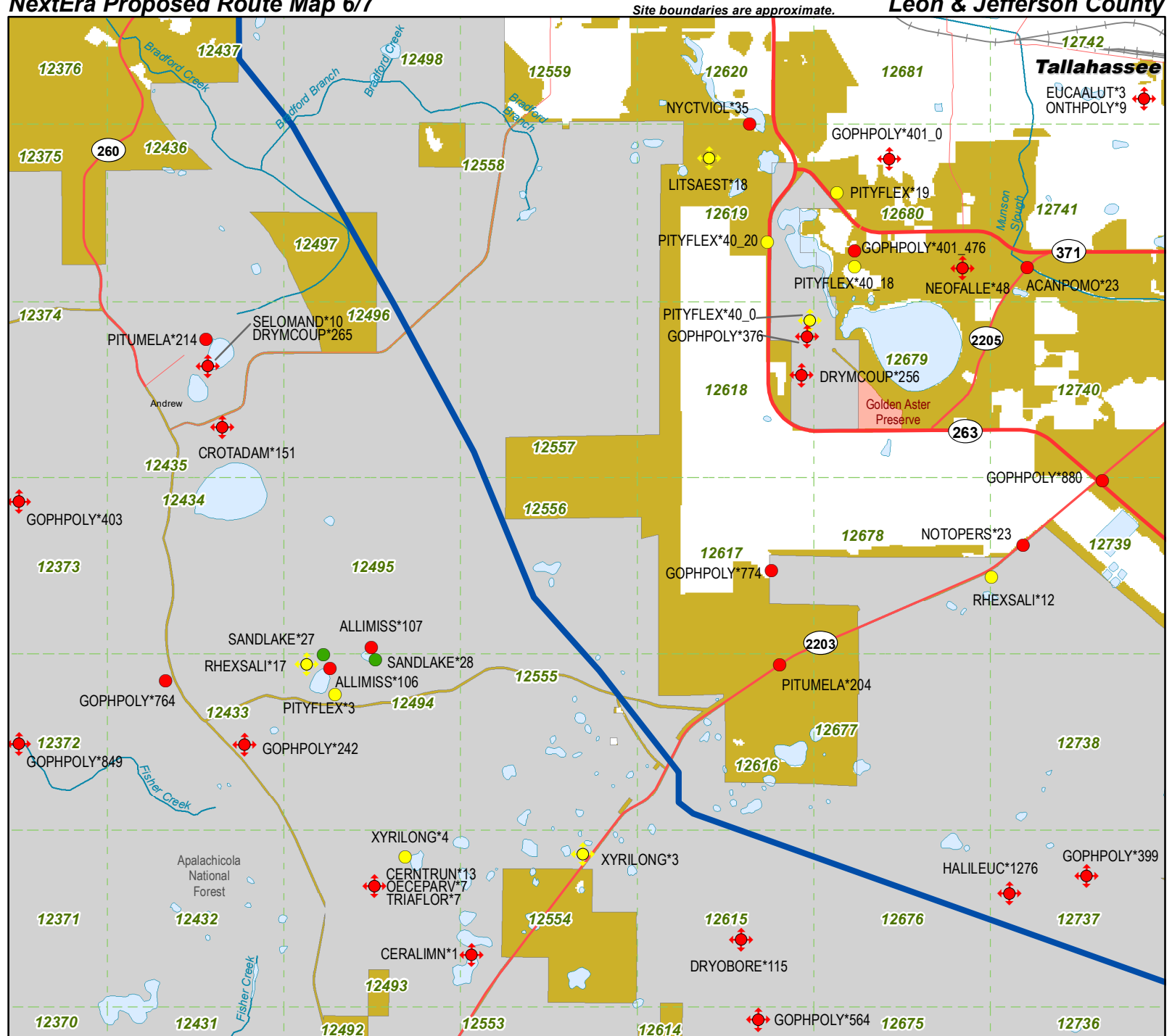
Land Acquisition Projects

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- County Boundary
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NextEra Proposed Route Map 7/7

Leon & Jefferson County

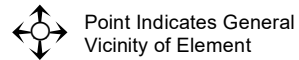


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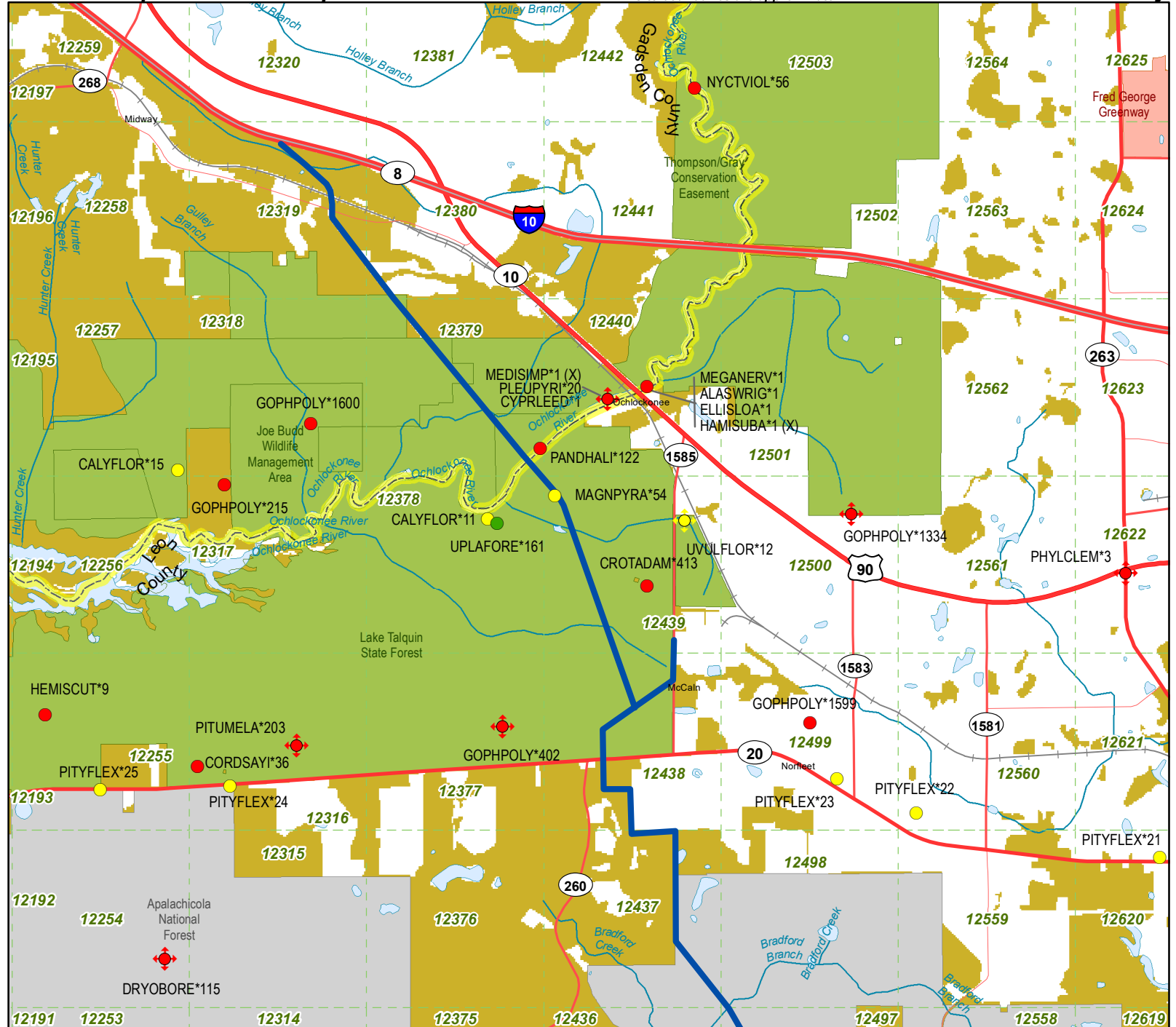
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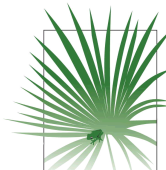
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0 0.5 1 2
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FLORIDA Natural Areas INVENTORY

CLIP v4.0 Resource Priorities

Biodiversity Resource Category

- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5

Landscape Resource Category

- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5

Surface Water Resource Category

- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5

Aggregated CLIP Priorities

- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5

Site Boundary

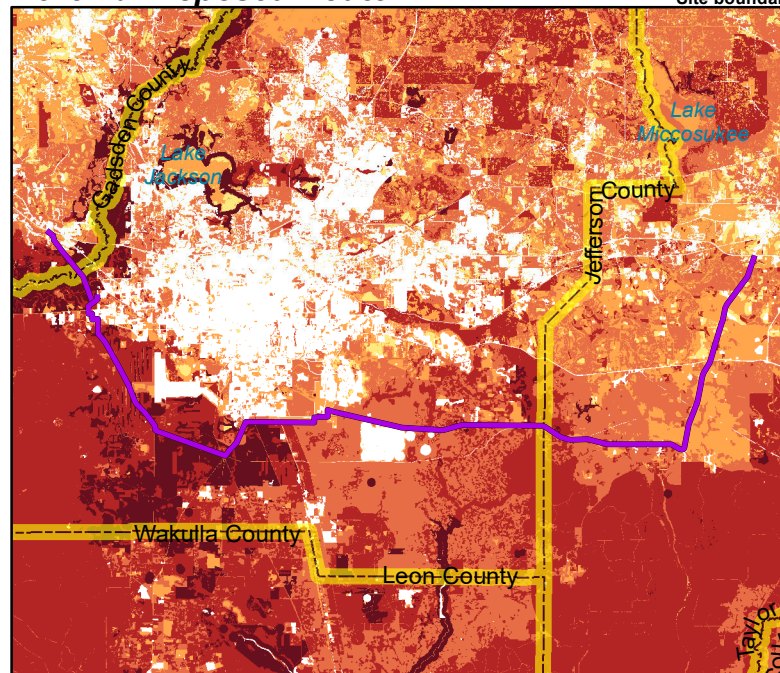


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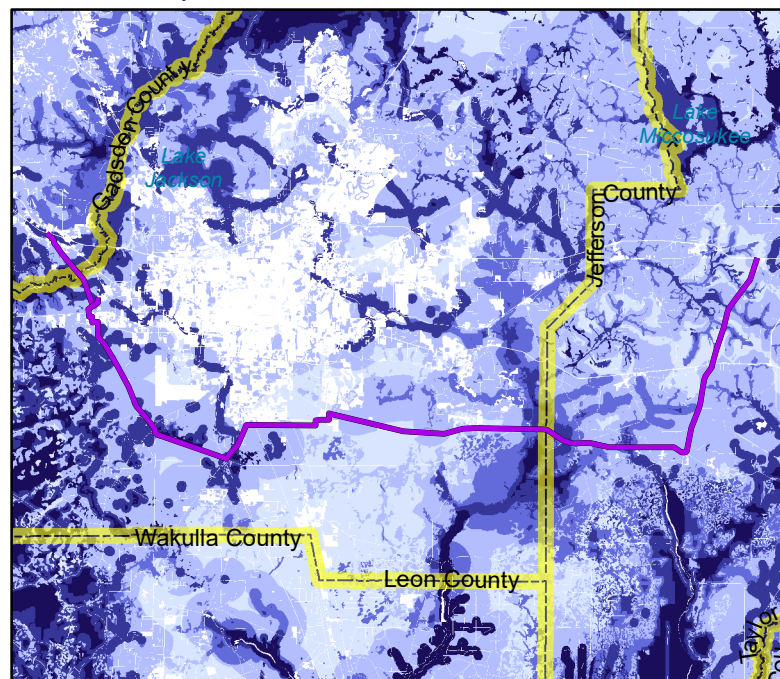
Critical Lands and Waters Identification Project (CLIP) is a cooperative effort between the FSU Florida Natural Areas Inventory, UF Center for Landscape Conservation Planning, and FL Fish & Wildlife Conservation Commission, with additional funding from FL Dept of Environmental Protection and US Fish & Wildlife Service.

NextEra Proposed Route

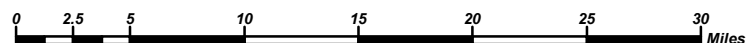
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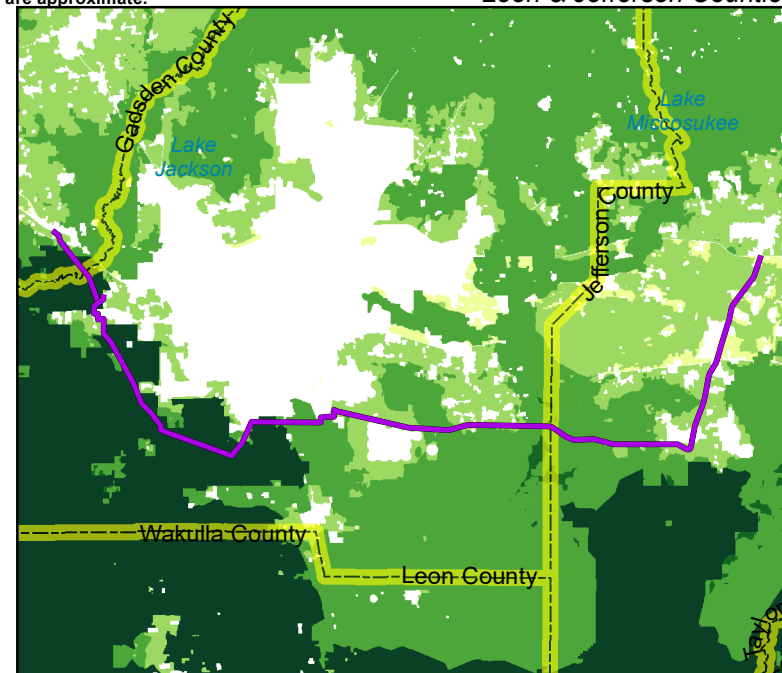
CLIP Biodiversity Resource Priorities



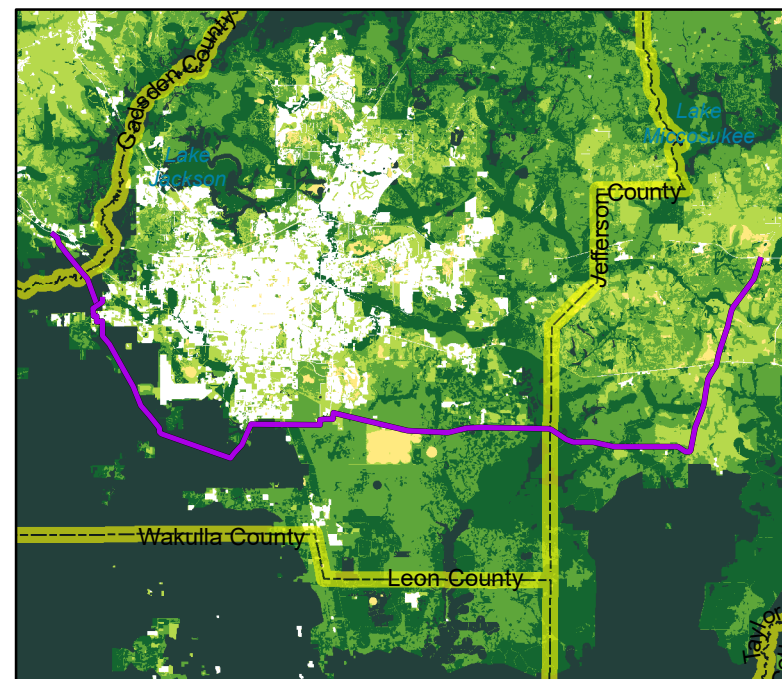
CLIP Surface Water Resource Priorities



Leon & Jefferson Counties



CLIP Landscape Resource Priorities



CLIP Aggregated Resource Priorities

FNAI ELEMENT OCCURRENCE REPORT on or near

NextEra Proposed Route



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
ALASWRIG*1	<i>Alasmidonta wrightiana</i>	Ochlockonee Arc-mussel	GH	SH	N	N	1931-11-13	1931-11-13: Blackwater stream (PNDBRI06FLUS).	1931-11-13: 3 individuals captured. This species is considered by many to be extinct (PNDBRI06FLUS).
ALLIMISS*106	<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)	1994	Sandhill upland lake surrounded by sandhill.	1994: One alligator (ca. 3 ft.) observed (PNDPRI03).
ALLIMISS*107	<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)	1995-04-09	Sandhill upland lake surrounded by sandhill.	1995-04-09: One young alligator, ca. 2-3 ft., with faint stripes observed swimming in open water (PNDPRI03).
ALLIMISS*31	<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)	2006-05	Alluvial river with some blackwater characteristics, large impoundment (Lake Talquin), and large shallow natural lake (Iamonia) with overflow connections to river.	Occurs throughout Ochlockonee River, Lakes Talquin and Iamonia, as well as nearby wetlands (P84BRO03FLUS; PNDJAC01FLUS). For data, see Source Features and Additional Topics.
ALLIMISS*53	<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)	2018-03-20	Bottomland forest, sand pine plantation, open longleaf pine forest	1 observed in 1989 (U89PAL15FLUS), and 1 in 2018 (F18FNA18FLUS)
AMBLALTE*13	<i>Amblyscirtes alternata</i>	Dusky Roadside-Skipper	G2G3	S2	N	N	2013-09-22	2010-04-25: The area is sandhill (F10JUE01FLUS).	2013-09-22: One adult seen and photographed by R. Owen (U13OWE01FLUS). 2013-08-03: One adult seen by D. Harder at intersection of powerline corridor and gas line; no photograph (PNDJUE01FLUS). 2010-04-25: One adult seen and photographed by D. Jue (F10JUE01FLUS).
AMPHPHOL*3	<i>Amphiuma pholeter</i>	One-toed Amphiuma	G3	S3	N	N	1983-10-11	1983-10-11: seepage slope, hardwood forest (Nyssa, Liriodendron, Acer) broad-bottomed stream valley, surrounded by planted pine uplands; organic mucky pockets along tributaries (F83MUL01FLUS).	1983-10-11: D. Jackson, P. Moler, and B. Mansell collected 8 individuals. 1983-04-28: D. Jackson and J. Muller collected 9 specimens (adults and juveniles) in mucky pockets along tributaries (F83MUL01FLUS); 1956-02-03: W. Riemer collected specimens (#560203-7 = UF/FLMNH 7755) (S56RIESMFLUS).

FNAI ELEMENT OCCURRENCE REPORT on or near

NextEra Proposed Route



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
APALSPIN*5	<i>Apalone spinifera</i>	Spiny Softshell	G5	S3	N	N	2009-04	The Ochlockonee River is a medium-sized blackwater stream that emanates from headwaters in Georgia and flows downstream to the Gulf of Mexico. The only separation barrier on the river within Florida is the Jackson Bluff Dam at the downstream end of Lake Talquin. The river receives a variety of pollutants, particularly from agriculture, industry, and urban areas in Georgia.	The abundance of observations confirms a viable population in this river. The occurrence is documented by multiple records extending from at least 1947 - 2009. For specific data, references, and sites, see individual source features as well as Additional Comments field in this record.
APHOHUBB*12	<i>Aphodius hubbelli</i>	Hubbell's Pocket Gopher Aphodius Beetle	GNR	S3?	N	N	1997-01-18 -- 1997-01-26	1997-01-26: No information given (U06SKE01FLUS).	1997-01-26: Four specimens were collected from 1997-01-18 to 1997-01-26, most likely in malt and dung-baited pitfall traps set in pocket gopher burrows (U06SKE01FLUS, A01SKE02FLUS, A91SKE01FLUS).
APHOLAEV*48	<i>Aphodius laevigatus</i>	Large Pocket Gopher Aphodius Beetle	G3G4	S3?	N	N	1997-01-18 -- 1997-01-26	1997-01-26: No information given (U06SKE01FLUS).	1997-01-26: Nineteen specimens were collected from 1997-01-18 to 1997-01-26, most likely at light or in malt and dung-baited pitfall traps set in pocket gopher burrows (U06SKE01FLUS, A01SKE02FLUS).
BOLBHAMA*9	<i>Bolbocerosoma hamatum</i>	Bicolored Burrowing Scarab Beetle	G3G4	S3	N	N	1961-03-28	1961-03-28: No description given (B73WOO01FLUS).	1961-03-28: One specimen was collected by A.M. Phillips using a black light trap (B73WOO01FLUS).
BOMBFRAT*7	<i>Bombus fraternus</i>	Southern Plains Bumble Bee	G2G4	S1S2	N	N	2016-12-06	none given	2 bees observed at 2 locations
BRICCORD*17	<i>Brickellia cordifolia</i>	Flyr's brickell-bush	G3	S2	N	E	2018-09-03	Roadside and extending into the woods.	Flowering plants on both sides of private road and extending into woods.



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FLORIDA
Natural Areas
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FNAI ELEMENT OCCURRENCE REPORT on or near *NextEra Proposed Route*



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
BRICCORD*2	<i>Brickellia cordifolia</i>	Flyr's brickell-bush	G3	S2	N	E	1959-09-17	1998: PASTURE (PNDCHA05FLUS). 1959: Semi-open oak woods; sandy open live oak woods (S59GODFSFLUS).	1998: SITE IS NOW A PASTURE (PNDCHA05FLUS). 1959: Plants to ca. 1 m high; flowers purplish-red (S59GODFSFLUS); 1959: "IN ALL OUR EXPLORATION IN WESTERN FLORIDA DURING THE PAST SEVERAL YEARS, THIS IS THE ONLY PLACE AT WHICH WE HAVE SEEN THIS PLANT. IT WAS LOCALLY ABUNDANT IN A SMALL ISLAND OF WOODLAND SURROUNDED BY FIELDS, BUT WAS APPARENTLY ABSENT FROM EXTENSIVE NEIGHBORING SIMILAR WOODLANDS." (A58GOD01FLUS)



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BRICCORD*8	<i>Brickellia cordifolia</i>	Flyr's brickell-bush	G3	S2	N	E	1999-10-26	1999-10-26: HIGH QUALITY UPLAND HARDWOOD FOREST ON NORTH FACING SLOPE ABOVE MOORE BRANCH, A TRIBUTARY TO ST. MARKS RIVER, PROTECTED IN A PRIVATE NATURE PRESERVE; CANOPY ON UPPER SLOPE IS DOMINATED BY QUERCUS HEMISPHERICA, LIQUIDAMBAR STYRACIFLUA, CARYA GLABRA, AND PINUS ECHINATA, WITH OSTRYA VIRGINIANA, MAGNOLIA GRANDIFLORA, CORNUS FLORIDA, VIBURNUM RUFIDULUM, AND VITIS ROTUNDIFOLIA ABUNDANT IN THE UNDERSTORY; LOWER, MESIC SLOPE INCLUDES THE ABOVE LISTED SPECIES AS WELL AS PINUS GLABRA, FAGUS GRANDIFOLIA, AND QUERCUS MICHAUXII AS DOMINANTS; HAMAMELIS VIRGINIANA AND SABAL MINOR ARE COMMON; ACCORDING TO THE OWNER, SPRING FLORA INCLUDES SPIGELIA MARILANDICA, TIPULARIA DISCOLOR, POLYGONATUM BIFLORUM, AND LISTERA AUSTRALIS; HERBS VISIBLE NOW INCLUDE SMILAX PUMILA, POLYSTICHUM ACROSTICHOIDES, AND CHASMANTHIUM SESSILIFOLIUM; OWNER REPORTS THAT AREA WAS SELECTIVELY LOGGED OF TULIP POPLAR AND RED CEDAR 50 YEARS AGO AND IS OTHERWISE UNDISTURBED (PNDCHA05FLUS).	1999-10-26: 13 PLANTS OBSERVED, WITH A TOTAL OF 23 STEMS, NEARLY ALL IN FRUIT; POPULATION EXTENDS FROM SUBXERIC UPPER SLOPE TO MESIC LOWER SLOPE (PNDCHA05FLUS).



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CALLIRUS*8	<i>Callophrys irus</i>	Frosted Elfin	G3	S2	N	N	2018-03-19	2010-04-11: The site is sandhill interspersed with off-road bike trails. The host plant for the Frosted Elfin grows in the area.	Since 2015, surveys for a one-day high count in March of each year has resulted in over 100 adults seen in one day.
CALYFLOR*11	<i>Calycanthus floridus</i>	sweet-shrub	G5	S2	N	E	2013-02-28	2010-07-20: High quality upland hardwood forest (U10JEN01FLUS).	Many plants observed at this site on several occasions between 1999 and 2010, 2011, and 2013 and in several areas.
CAMBSCHM*9	<i>Cambarellus schmitti</i>	Fontal Dwarf Crayfish	G2G3	S2S3	N	N	2011-08-30	Big Blue Spring and its short run flow directly into the Wacissa River, a spring-run stream. Much of this river system is within state conservation land.	Although data are scant, occurrence is documented by multiple collections spanning 6 decades (1952-2011). For specific data, references, and sites, see individual source features as well as Additional Topics field in this record.
CROTADAM*151	<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G4	S3	N	N	1988 circa	No general description given	Ca. 1988: 1 snake observed, ca. 3 ft. (U95CAI01).
CROTADAM*161	<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G4	S3	N	N	1995	No general description given	1980-1995: 8 sightings, 3-5 ft. (U95CAI01).
CROTADAM*413	<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G4	S3	N	N	2018-05-08	Successional hardwood forest	One 4.5-5 foot long adult commuting across dirt road (F18FNA19FLUS)
CYPRLEED*1	<i>Cyprinella leedsii</i>	Bannerfin Shiner	G4	S3	N	N	1989	1989: Alluvial stream (U91LEI01FLUS).	Over 1129 specimens collected by various collectors at 26 localities (see attached sheets) between 1952 and 1989. Frequents main channel of river and larger tributaries; taken over sandy bottom in moderate current; 746 of 1116 specimens are from Leitman et al survey, 17 from floodplain, 721 from main channel, one from backwaters and seven from oxbows (U91LEI01FLUS).
DRYMCoup*217	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	T	FT	1981 pre	No general description given	1981-Pre: indigo observed near southwest corner of Lake Munson by J. Stevenson (1981-01-23 interview of J. Stevenson by P. Moler: U82MOL01FLUS).
DRYMCoup*218	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	T	FT	1981 pre	No general description given	1981-Pre: indigo observed in T1S, R1E, sec 36 by J. Stevenson (1981-01-23 interview of J. Stevenson by P. Moler: U82MOL01FLUS).



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DRYMCUP*256	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	T	FT	1970	1970: South side of lake is mostly disturbed sandhill (but <i>Gopherus</i> still present in 1988) (U82MOL01, A85MOL02FLUS).	1970: Indigo observed by Henry Stevenson post 1970 (moler interview of H. Stevenson, 1981-11-19) (U82MOL01FLUS, A85MOL02FLUS).
DRYMCUP*265	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	T	FT	1960	No general description given	INDIGO OBSERVED BY L. WILLIAMS DURING 1960'S (MOLER INTERVIEW OF L. WILLIAMS, 1981-08).
DRYOBOR*115	<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3	S2	E	FE	2017	Sandhill and longleaf and slash pine mesic flatwoods	The Wakulla District has been increasing in numbers of woodpeckers over the past 10 years; artificial inserts and translocation of subadult RCWs have been used to help the effort of "growing" RCW colonies (PNDCAS04FLUS, U17NES01FLUS). In pre 1983 surveys ca. 156 colonies and numerous unassociated cavity trees were estimated to be dispersed over appropriate habitat within ca. 105 sections of land (U83UFS01FLUS). From 2004 to 2017, with the help of augmentation and presumably improved management the population increased from 110 active clusters to 231 active clusters (PNDCAS04FLUS, U17NES01FLUS). See Source Features and Visits in this EOR.
DS*15396	Data Sensitive Element	Data Sensitive	G5	S3	N	N	1999-10-26	Data Sensitive	Data Sensitive
ELLIPUR*1	<i>Elliptio purpurella</i>	Inflated Spike	G2	S2	N	N	2000 pre	Long stretch of Ochlockonee River; occurrence extends into Georgia. This river passes through woodlands and agricultural lands but receives pollutants from various sources along its way.	Species is known from multiple collections along the Ochlockonee River, from just above Lake Talquin well into Georgia. Specific Florida collections are recorded in Additional Data; the only specific collection date is in 1983.

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ELLISLOA*1	<i>Elliptioideus sloatianus</i>	Purple Bankclimber	G2	S1S2	T	FT	1980-07-29	1980-07-29: river ca. 20 meters wide, 2+ meters deep, moderately low with slight current; water silty with yellow-brown color. Mussels found in firm clay-sand river banks in 2-6 ft. depth. Majority of mussels located about 1 mile upstream (UNDMCC02FLUS).	1980-07-29: Lee and McCullagh collected 8-10 specimens found in sandy clay substrates of sloping bank, some current (UNDMCC02FLUS). 1933-06-08: T. and G.W. Van Hyning collected UF 1365 (4), UF 2794 (4) and UF 2795 (18) (S33VANSMLUS). 1931-11-13: T. and O.C. Van Hyning collected UF 1370 (2), UF 2790 (32) and UF 2793 (1) (S31VANSMLUS). 1930-06-08: T. and G.W. Van Hyning collected one; UF 8361 (1) (S30VANSMLUS).
EUCAALUT*3	<i>Eucanthus alutaceus</i>	Mat Red Globe Scarab Beetle	G2G3	S1S2	N	N	1959-11-01	1959-11-01: No description given (B73WOO01FLUS).	1959-11-01: One specimen was collected by G.W. Dekle (B73WOO01FLUS).
GOPHPOLY*1310	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2006-06-30	2011: still in national forest, though bordered on north by highway and urban area (Tallahassee). 2006-06-30: longleaf pine/turkey oak sandhill and transitional edge areas (PNDBAR09FLUS, PNDGIL06FLUS, U06GIL02FLUS). 1993-09-12: disturbed jeep trail with sand pine plantation to east and sand pit to west (PNDPRI03FLUS). 1993-06-13: sandhill with longleaf pine, Aristida, Asclepias; recently burned (PNDOST01FLUS).	2006-06-30: area just south of Capital Circle: Gilbert and Barnett documented 99 gopher tortoise burrows, with > 75% active (PNDBAR09FLUS, PNDGIL06FLUS, U06GIL02FLUS). 1993-09-12: one active burrow (PNDPRI03FLUS). 1993-06-13: adult male observed feeding, one active burrow observed (PNDOST01FLUS). 1986: tortoises present in this area (source unspecified).
GOPHPOLY*1334	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2018-02-22	2005-11-02: sandhill and ruderal communities with severe and heavy disturbance from utility corridors, forestry operations, and roads (F06FNA14FLUS).	2 burrows observed in 2018 (F18FNA18FLUS). 12 active burrows and 1 tortoise observed incidentally during natural community survey in 2005 (F06FNA14FLUS, PNDROS02FLUS).
GOPHPOLY*1597	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2018-04-25	Pine plantation (historic upland pine) with disturbances from fire exclusion, woody encroachment, forestry operations, and a road.	3 burrows observed in 2018 (F18FNA18FLUS)
GOPHPOLY*1599	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2004-11-10	Power line right-of-way (U04ARE04FLUS)	8 tortoise burrows in ca. 350-m stretch of power line right-of-way (U04ARE04FLUS)
GOPHPOLY*1600	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2018-02-22	Severely disturbed sandhill	Species observed in 2006 (F06FNA14FLUS), and 1 observation in 2018 (F18FNA18FLUS)



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GOPHPOLY*242	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1987 pre	No general description given	1987-pre: Species occurrence noted here in Diemer's unpublished map set (U86DIE01FLUS).
GOPHPOLY*310	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1987-04-21	1987-04-21: area appears to be former pine flatwoods with cypress strands, south of SR-59 pine had been cut recently, north side in young slash pine plantation, grassy roadsides (P87JAC01FLUS).	1987-04-21: D.O.R. adult observed by D. Jackson and S. Jones (P87JAC01FLUS).
GOPHPOLY*398	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1985	No general description given	D. MARTIN OBSERVED SPECIES AT THIS LOCALITY CA. 1985-1986.
GOPHPOLY*399	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1985	No general description given	D. Martin observed species at this locality from 1985-1986 (U88MAR04FLUS).
GOPHPOLY*402	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2018-02-20	2018 Restoration sandhill with planted pines; moderate disturbance from fire exclusion (F18FNA18FLUS). 2006-04-30: sandhill community with forestry operations disturbance (F06FNA14FLUS).	Species observed in 1985-1986 (U88MAR04FLUS), 90-100+ burrows observed, in 1999 (PNDPRI03FLUS), 7 active burrows observed in 2006 (F06FNA14FLUS), two burrows observed in 2018 (F18FNA18FLUS). See individual Source Features for details.
GOPHPOLY*420	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1988-09-16	PLANTED PINE PLANTATION, TREE HEIGHT 5-7 FEET TALL in 1989.	1988: Ostertage observed 1 TORTOISE CROSSING DIRT RD IN MID AFTERNOON, SHELL WAS DAMAGED BUT WAS HEALED, OTHERWISE TORTOISE SEEMED HEALTHY (PNDOST01FLUS).
GOPHPOLY*564	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1990-03-08	LONGLEAF PINE FLATWOOD WITH WIREGRASS UNDERSTORY. PART OF SITE HAS BEEN CLEAR CUT. SOME SMALL OAKS PRESENT.	8 ACTIVE BURROWS SEEN, NUMEROUS INACTIVE BURROWS, 1 SHELL FOUND.
GOPHPOLY*636	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1990-09-29	LONGLEAF PINE, 20-30 YRS. OLD, BAHIA GRASS ROAD EDGE.	5 ACTIVE BURROWS OBSERVED.

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GOPHPOLY*774	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1992-04-17	DISTURBED PINELAND (FORMER LONGLEAF SANDHILL) IN OFF-SITE SLASH PINE, WITH ABUNDANT SMALL TURKEY OAKS, VERY SPARSE GROUND COVER (SOME CLUMPS OF WIREGRASS PRESENT).	REPRODUCING POPULATION, LIKELY FOOD-LIMITED JUDGING FROM THE SPARSE GROUND COVER; AT LEAST ONE SMALL JUVENILE BURROW, SEVERAL ADULT.
GRAPBARB*18	<i>Graptemys barbouri</i>	Barbour's Map Turtle	G2	S2	N	ST	2004-04-19	2000-04-23: alluvial river, probably with some blackwater characteristics (PNDJAC01FLUS).	2004-04-19: Aresco and Gunzburger observed individual ca. 700 straightline m upstream of US-90 (U05ARE01FLUS). 2001-06-28: G. Wallace observed two basking, including one juvenile, one just on each side of US-90 (see U06WAL03FLUS for gps points; also A08ENG01FLUS). 2000-04-23: D. Jackson and M. Aresco observed ca. one dozen individuals basking upstream of the US 90 bridge; these included an adult female as well as males and juveniles (PNDJAC01FLUS, PNDARE01FLUS). 1993-05-26: Cailteux and Nordhaus collected a juvenile (UF 91087) 5.3 km straightline distance below US-27 bridge, and a second juvenile 0.8 km straightline distance below same bridge (A96ENG01FLUS). Bruce Means (PNDMEA01FLUS) believes this population to be the result of introduction (perhaps by C. Longden in ca. 1970) (PNDJAC01FLUS).
GRAPBARB*21	<i>Graptemys barbouri</i>	Barbour's Map Turtle	G2	S2	N	ST	2014-06-23	2002-05-30: Spring-run stream lined by forest. Sand parking lot (PNDJAC01FLUS).	2014-06-23: R. and H. Means caught, photographed, and released adult female while scuba diving for fossils near mouth of Cow Creek, ca. 5 km above Nuttall Rise and confluence with Aucilla River (U14MEA03FLUS, PNDMEA02FLUS, PNDMEA03FLUS). 2002-05-30: D. Jackson observed female nesting in parking lot (southern end of CR-59), obtained 12 eggs, 8 of which later hatched; later released female ca. 200 m downstream; confirmatory photographs (UF 134682) deposited in FL Museum of Natural History herpetology collection (A03JAC03FLUS).



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HALILEUC*1276	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N	2002	2005-07-12: Source does not provide a description.	Nest status: Active, 2002; Not active, 2003; Unknown status or not assessed, 2001, 2000, 1999;(U03FWC01FLUS)
HAMISUBA*1	<i>Hamiota subangulata</i>	Shiny-rayed Pocketbook	G2	S1S2	E	FE	1957-11-15	1957-11-15: river ca. 20 meters wide, 2+ meters deep, moderately low with slight current; water silty with yellow-brown color. Mussels found in firm clay-sand river banks in 2-6 ft. deep. Majority of mussels about 1 mile upstream (UNDMCC02FLUS).	1980-07-09: Lee and McCullagh failed to find species. Lee and McCullagh have conducted four surveys between 1974 and 1980 at site without finding any specimens. 1957-11-15: (3) individuals collected. Collection field number is MFM 7633. 1947-01-28: Walker collected six individuals. 1933-06-08: T. and G.W. Van Hyning collected 22, UF 3281 (22) (S33VANSNFLUS). 1931-11-13: T. and O.C. Van Hyning collected four, UF 3280 (4) (S31VANSNFLUS). 1930-06: O.C. and G.W. Van Hyning collected 34, UF 3283 (34) (S30VANSNFLUS). No date: T. and G.W. Van Hyning collected one, UF 8434 (1).
HESPSLOS*23	<i>Hesperia attalus slossonae</i>	Seminole Skipper	G3G4T3	S3	N	N	2013-08-03	2013-08-03 and 2013-07-27: Sandhill (PNDJUE02FLUS). 2010-07-24: Sandhill. The butterfly was seen at the edge of a pond surrounded by mixed hardwoods and longleaf pine (F10JUE01FLUS).	2013-08-03: One adult seen by D. Harder (PNDJUE02FLUS). 2013-07-27: One adult seen and photographed on NABA count (PNDJUE02FLUS). 2010-07-24: One adult seen and photographed on NABA count (F10JUE01FLUS).
LITHCAPI*184	<i>Lithobates capito</i>	Gopher Frog	G3	S3	N	N	2015-01-22	Sandhill with breeding ponds.	Gopher frogs observed in this area, both as tadpoles in ponds and frogs in gopher tortoise burrows, from 1990 to 2015. In 2015, 32 frogs were observed in tortoise burrows during a tortoise survey.
LITHCAPI*22	<i>Lithobates capito</i>	Gopher Frog	G3	S3	N	N	1990-01-21	APPROX. 1 ACRE DEPRESSION MARSH (VEGETATED WITH PANICUM AND ELEOCHARUS) WITHIN YOUNG SAND PINE PLANTATION (TREES CA. 15 FT. TALL) ON ARENACEOUS SOIL.	1990: PALIS HEARD 3 CALLING MALES. 1985-86: D. MARTIN OBSERVED 2 INDIVIDUALS NEAR THIS LOCALITY CA.



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MACRTEMM*15	<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	G3G4	S3	N	N	2018-04-11	Ochlockonee River is a dark, often murky river with many logs and snags; adjacent banks presumably used for nesting. Lake Talquin is an impoundment of middle Ochlockonee River. Lake Iamonia is a large shallow lake with abundant vegetation; it receives overflow from Ochlockonee River during floods.	Alligator Snapping Turtles have been recorded from the Ochlockonee River, Lake Talquin and Lake Iamonia since at least 1972.
MACRTEMM*18	<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	G3G4	S3	N	N	2000	Blackwater river (Aucilla) and tributary spring run river (Wacissa) (B89PRI01FLUS).	This record is based on multiple visual observations but no confirmatory photographs or specimens. Because none of the observers is considered to be an expert turtle biologist, there is at least a remote possibility of confusion with Chelydra (PNDJAC01FLUS). If Macrochelys occurs here, it is likely rare.
MAGNPYRA*54	<i>Magnolia pyramidata</i>	pyramid magnolia	G4	S3	N	E	2008-10-15	2008-10-15: Point in upland pine habitat, near upland mixed hardwood forest (U08JEN04FLUS). 2001-06-07: TREES IN A SMALL PIECE OF INTACT SLOPE FOREST ABOUT 50 FEET UPSLOPE FROM OCHLOCKONEE RIVER FLOODPLAIN (PNDCHA05FLUS).	2008-10-15: No plants found (U08JEN04FLUS). 2001-06-18: ELEVEN TREES, MOST YOUNGER MATURE TO SAPLING SIZE (PNDCHA05FLUS).
MEDISIMP*1	<i>Medionidus simpsonianus</i>	Ochlockonee Moccasinshell	G1	S1	E	FE	1933-06-08	1933-06-08: river moderately low, slight current, silty (yellow-brown water); mussels in moderately firm clay-sand river banks at 2-6 ft. depth (UNDMCC02FLUS).	1980-07-29: not found (McCullagh Station 285) on canoe trip of ca. 0.1 miles upstream. Several lots housed at Florida Museum of Natural History (UF). 1933-06-08: T. and G.W. Van Hyning collected UF 4162 (21). 1931-11-13: T. and O.C. Van Hyning collected UF4158 (24), UF 8399 (1). 1920-06-08: O.C. and G.W. Van Hyning UF 4164 (10) AND UF 8402 (2) (UNDMCC02FLUS).



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MEGANERV*1	<i>Megaloniais nervosa</i>	Washboard	G5	S3	N	N	1988-07-29	1988-07-29: river ca. 20 meters wide, 2+ meters deep, moderately low with slight current; water silty with yellow-brown color. Mussels found in firm clay-sand river banks in 2-6 ft. depth. Majority of mussels located about 1 mile upstream (UNDMCC02FLUS).	1988-07-29: Lee and McCullagh collected about 10 specimens on, up to 150 mm long, in firm sandy-clay substrate in 3-6 ft. of water, mostly on sloping banks in some current. Found with toes (palpation). Site mentioned in A56CLE01FLUS. Numerous lots housed at UF (Gainesville) but not included here.
MUSTOLIV*29	<i>Mustela frenata olivacea</i>	Southeastern Weasel	G5T4	S3?	N	N	1992-01-05	No general description given	1992-01-05: A. Whitehouse, DEP, observation. Roadkill; not collected.
NOTOPERS*13	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1985-86 winter	1985-86Wtr: sinkhole pond vegetated with Ranunculus sp. (Rhynchospora sp.?), Cephalanthus occidentalis, Hypericum sp., Panicum sp., Carex sp., and dogfennel (U88MAR04FLUS).	One specimen was collected in 1984 (A17FAR01FLUS). D. Martin observed this species in the winter of 1985-1986 (U88MAR04FLUS). Subsequent surveys from 1990-2016 have not detected Striped Newts (U18CPI01FLUS).
NOTOPERS*19	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	2000	1994: Depression marsh dominated by Juncus sp., Cephalanthus occidentalis, and Hypericum sp. (PNDPRI03FLUS).	Presumed extirpated. Present through at least 2000 but part of the vanished (mostly to entirely) Woodville Karst metapopulation (U14MEA01FLUS, PNDMEA03FLUS). For data, see Source Features and Additional Topics.
NOTOPERS*21	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1993-01-31	Depression marsh that has been partially dug out for use as a burrow pit; site within longleaf pine sandhill (PNDMEA01FLUS).	Specimens have been collected or individuals captured from 1990-1997. Subsequent visits have not detected Striped Newts through 2016 (U18CPI01FLUS). This pond has been heavily damaged by illegal off-road vehicle use (U02MEA01FLUS, U04MEA01FLUS).
NOTOPERS*35	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	2015-07-18	Depression marsh within sandhill	Presence confirmed by dipnet in 1994 (U94MEA02FLUS, U18CPI01FLUS). In 2013 and 2015 reintroduced metamorphs from a captive breeding program were captured (U18CPI01FLUS).
NOTOPERS*36	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	2016-08-17	Grassy ephemeral pond surrounded by quality sandhill (PNDMEA01FLUS, U94MEA02FLUS). In 2012 a synthetic liner was installed underneath to increase hydroperiod.	Several captured dipnetting in 1994 and 1995. In 2013 newts were reintroduced and 31 newts captured from 2014-2016 (U18CPI01FLUS).

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NOTOPERS*37	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1994-03-16	1994-03-16: Grassy ephemeral pond surrounded by quality sandhill (PNDMEA01FLUS, U94MEA02FLUS).	1 Striped Newt was captured in 1994. No subsequent surveys have detected Striped Newts (U18CPI01FLUS).
NOTOPERS*4	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1990	Depression marsh	Species observed in 1986 (F86JAC02FLUS) and 1990 (A17FAR01FLUS), but no subsequent surveys have detected this species (U18CPI01FLUS). For data, see Source Features and Additional Topics.
NOTOPERS*52	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1994-07-09	Depression marsh	Striped Newts were detected twice in 1994 during surveys. No subsequent surveys have detected Striped Newts. (U18CPI01FLUS)
NOTOPERS*53	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1997-10-10	Depression marsh	Striped Newts were detected in 1994 and 1997. No subsequent surveys have detected this species (U18CPI01FLUS).
NOTOPERS*54	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1998-04-30	Depression marsh	Striped Newts were observed during dipnet surveys in 1994, 1997 and 1998. No subsequent surveys have detected this species (U18CPI01FLUS).
NOTOPERS*55	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1994-07-05	Depression marsh in sandhill	Striped Newts were detected during two dipnet surveys in 1994. No subsequent surveys have detected this species. (U18CPI01FLUS)
NOTOPERS*56	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	2015-03-24	Depression marsh with a synthetic liner underneath to increase hydroperiod.	Newts present in 1994 and 1997 but apparently extirpated by 2000s. Captive-breds repatriated in 2013 were detected in 2015 (U18CPI01FLUS).
NOTOPERS*58	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1967	1967: sandhill (U93FRA01FLUS).	1993-1994: pond where centroid is located surveyed several times, no newts observed (PNDPRI03FLUS). 1967: specimen collected (U93FRA01FLUS).
NOTOPERS*87	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1998-04-16	Depression marsh in sandhill	One Striped Newt captured during dipnet survey in 1998. No other Striped Newts found in 9 surveys from 1999-2016 (U18CPI01FLUS).
NOTOPERS*88	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	2015-05-17	Depression marsh with a synthetic liner underneath to increase hydroperiod.	11 repatriated Striped Newts have been detected in 2014 & 2015. This pond has been repatriated with captive breeding stock. (U18CPI01FLUS)



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NOTOPERS*89	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1998-04-16	Depression marsh	Striped Newt was observed during a dipnet survey in 1998. No subsequent surveys have detected this species (U18CPI01FLUS).
NOTOPERS*90	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N	1997-02-11	Ephemeral depression marsh	Striped Newt was observed during a dipnet survey in 1997. No subsequent surveys have detected this species (U18CPI01FLUS).
ONTHPOLY*9	<i>Onthophagus polyphemi polyphemi</i>	Punctate Gopher Tortoise Onthophagus Beetle	32G3T2T3	S2	N	N	1968-02-24	1968-02-24: from a gopher tortoise burrow (B73WOO01FLUS).	1968-02-24: Eight specimens were collected from a gopher tortoise burrow by R.E. Woodruff (B73WOO01FLUS).
PANDHALI*122	<i>Pandion haliaetus</i>	Osprey	G5	S3S4	N	N	2000-04-23	Alluvial river, probably with some blackwater characteristics.	2000-04-23: D. Jackson and M. Aresco observed several individuals foraging and perching, as well as one on nest, within one mile downstream of US-90 bridge; nest was on west side of channel in very low (ca. 2 m above low water level) cypress.
PITUMELA*204	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	1999-08-11	99-08-11: sandhill/ruderal (PNDPRI03).	99-08-11: one adult snake observed dead on roadway (PNDPRI03).
PITUMELA*214	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	2006-05-14	2006-05-14: Ruderal picnic area within Silver Lake Recreation Area. Lawn with large sweet gum and live oak trees to the west of Silver Lake (PNDJEN03FLUS; PNDJEN04FLUS).	2006-05-14: One 5 foot long individual observed sunning itself on lawn of recreation area. The snake went into a hole at the base of a large live oak tree (PNDJEN03FLUS; PNDJEN04FLUS).
PITUMELA*28	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	1990-07-26	SAND PINE PLANTATION ON S SIDE OF RD., LONFLEAF PINE-TURKEY OAK SANDHILL ON N SIDE.	1990: JONES OBSERVED 1 DOR SPECIMEN CA. 5' IN LENGTH. 1989: PALIS CAPTURED 1 INDIVIDUAL (1245 MM SVL, 216 MM TAIL) CROSSING TRAM ROAD FROM N TO S AT 1700 EDT. 1985-1986: D. MARTIN OBSERVED 2 INDIVIDUALS IN THIS AREA.
PITUMELA*35	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	2007-06-19	2007-06-19: Neglected sandhill with many depression marshes. Portions planted in pine, but not managed (PNDHIP01FLUS).	2007-06-19: Hipes observed adult dead on road not suitable for specimen (PNDHIP01FLUS). 1989-09-17: 1 DOR male, 3 feet long (PNDOST01FLUS).
PITUMELA*67	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	1964-08-06	No general description given	SPEC. COLL. 6 AUG 1964 BY ROBERT CHRISTENSEN.



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PITYFLEX*10	<i>Pityopsis flexuosa</i>	zigzag silkgrass	G3	S3	N	E	1986-09-19	BORDERING SCRUB OAK WDLAND, SAND RIDGE. ASSOC. SPP: QUERCUS HEMISPHERICA, Q. INCANA, VACCINIUM ARBOREUM, CASSIA FASCICULATA, PITYOPSIS GRAMINI-FOLIA, ETC.	LOCALLY ABUNDANT
PITYFLEX*16	<i>Pityopsis flexuosa</i>	zigzag silkgrass	G3	S3	N	E	2013-10-24	pine plantation and natural longleaf pine/wiregrass sandhill; also along edge of power line through plantation	2013: 240 clumps of plants and 25 individual plants counted - in flower and fruit; 1985-plants present
PITYFLEX*17	<i>Pityopsis flexuosa</i>	zigzag silkgrass	G3	S3	N	E	1985-11	No general description given	1985-11: NONE GIVEN.
PITYFLEX*23	<i>Pityopsis flexuosa</i>	zigzag silkgrass	G3	S3	N	E	1985-11	No general description given	1985-11: NONE GIVEN.
PITYFLEX*3	<i>Pityopsis flexuosa</i>	zigzag silkgrass	G3	S3	N	E	1983-09-22	OPEN AREA BORDERING PINE-TURKEY OAK SANDHILL; EDGE OF SLOPE TO WOODED SANDHILLS. WEST SIDE OF PARKING LOT.	1983-09-22: FLOWERING/FRUITING; ABUNDANTLY FLOWERING; PLANT MOST ABUNDANT ON SLOPE ABOVE OAKS-BLUEBERRY- PINES NEAR HIGHWAY; HUNDREDS OF INDIVIDUALS.
PITYFLEX*45	<i>Pityopsis flexuosa</i>	zigzag silkgrass	G3	S3	N	E	2016-11-12	Roadside. No description given.	Presence confirmed
PLEUPYRI*20	<i>Pleurobema pyriforme</i>	Oval Pigtoe	G2	S1S2	E	FE	1957-11-07	1957-11-07: Blackwater Stream (PNDBRI06FLUS).	1957-11-07: One individual discovered. Collection code is MF7634 (PNDBRI06FLUS).
PSEUSUWA*17	<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	G5T3	S3	N	N	2009	Spring-run stream with abundant aquatic vegetation, bordered by second growth hardwood forest (hydric hammock). Hydrilla has invaded and threatens much of Wacissa River.	2009-late 1990's: various observations of basking individuals, including by D. Jackson and G. Guyot, and R. Walker. 2002-09-05: A. Johnson observed female nesting in road ca. 1/4 mile from river south of Calico Hill (PNDJOH01FLUS). 2002-05-30: D. Jackson observed two females nesting in parking lot at head of Wacissa, end of SR-59. 1987-04-21: D. Jackson observed ca. 200 individuals of all sizes basking in 10-mile stretch, estimated many more. Specimens: 1953, F. R. Cagle, gravid female, 7 June 1953 (see Cagle 1955); MCZ 46223; UF-74811 (just below Nutall Rise).

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PSEUSUWA*20	<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	G5T3	S3	N	N	2018-04-11	River with both blackwater and alluvial (predominant) characteristics; silt load varies seasonally. Banks vary from bluffs of 5 m or more to low-profile floodplain. Aquatic vegetation does not appear to be abundant. 2004: water quality in this river is known to be degraded from upstream (Georgia) pollution.	Species occurs throughout much of lake and river, where individuals can be observed basking on woody debris, stumps, and limbs near the shoreline. For data, see Source Features and Additional Topics.
PTOMSCHW*29	<i>Ptomaphagus schwarzi</i>	Schwarz' Pocket Gopher Ptomaphagus Beetle	G3	S3	N	N	1997-01-18 -- 1997-01-26	1997-01-26: No information given (U06SKE01FLUS).	1997-01-26: One specimen was collected from 1997-01-18 to 1997-01-26, most likely in a malt and dung-baited pitfall trap in a pocket gopher burrow (U06SKE01FLUS, A01PEC01FLUS).
PYCNFLOR*22	<i>Pycnanthemum floridanum</i>	Florida mountain-mint	G3	S3	N	T	2005-08-14	2005-08-14: Ecotone of maintained cemetery and secondary woods (PNDRUS02FLUS).	2005-08-14: One plant observed in flower (PNDRUS02FLUS).
QUADINFU*3	<i>Quadrula infucata</i>	Sculptured Pigtoe	G3	S2S3	N	N	2014 pre	Ochlockonee River, upper. Most of land bordering this stretch of river is undeveloped, much of it forested.	This occurrence is documented by multiple records extending from XX - YY. Williams et al. (2014) depict at least 6 sites from which this occurrence has been documented. For specific data, references, and sites, see individual source features and Additional Comments field in this record.
RHEXSALI*17	<i>Rhexia salicifolia</i>	Panhandle meadowbeauty	G2	S2	N	T	1992	1992: SANDS OR SANDY-PEATS OF MARGIN OF LINESINK LAKE; SIGNS OF TRAMPLING AND VEHICLE ACTIVITY IN THE SENSITIVE SHORELINE ZONE (U95FWS05FLUS).	1992: ABUNDANT (U95FWS05FLUS). 1962-08-15: ABUNDANT; HYBRIDS BETWEEN THIS AND R. MARIANA OBSERVED; FLOWERING (S62KRAFSFLUS).
RHEXSALI*180	<i>Rhexia salicifolia</i>	Panhandle meadowbeauty	G2	S2	N	T	2015-07-29	Sandhill pond border (F15GRE01FLUS).	Plants present on site (F15GRE01FLUS).

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SALIFLOR*17	<i>Salix floridana</i>	Florida willow	G2	S2	N	E	2002-05-20	2002-05-02: MUCKY SOIL BY SHORE OF WACISSA RIVER WITH BUTTONBUSH (CEPHALANTHUS OCCIDENTALIS); BORDERED INLAND BY A FLOODPLAIN SWAMP (ASH, MAPLE, GUM) (PNDJOH01FLUS).	2002-05-20: ONE TREE 10-12 FT TALL LEANING OVER SMALL OUTPOCKET OF RIVER IN WESTERN SHORE (PNDJOH01FLUS).
SALIFLOR*2	<i>Salix floridana</i>	Florida willow	G2	S2	N	E	1983-03-21	SHORES OF WACISSA SPRINGS, UPSTREAM FROM THE PUBLIC AREA [HORSEHEAD RUN]; SWAMP/SWAMP WOODS.	1974-06-08: IN SHALLOW WATER. PLANT WITH A SINGLE STEM CA 3 M TALL. 1983-03-21: 75 PLANTS SEEN E SIDE OF RIVER 100 YDS S OF BOAT RAMP; STAMINATE PLANT W OF DIVING BOARD AT SPRINGS IN KNEE DEEP WATER; MOST PLANTS LOCATED 15-40 FT. INLAND OF SHRUB/TREE BORDER ALONG RIVER (SEE ATTACHED FOR MORE EO DATA.)
SANDLAKE*27	Sandhill upland lake		G3	S2	N	N	2004	Lake surrounded by sandhill.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1995-04-08) (U05FNA02FLUS). 1995-04-08: Clear water lake, ca. 10 acres in size with white sandy margins bordered upslope by live oak, many types of submerged and emergent vegetation present; water still high from Summer 1994 (PNDPRI03).
SANDLAKE*28	Sandhill upland lake		G3	S2	N	N	2004	Lake surrounded by sandhill.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1995-04-09) (U05FNA02FLUS). 1995-04-09: Clear water lake, ca. 8 acres in size; bordered upslope by live oak, many types of submerged and emergent vegetation present; water still high from Summer 1994 (PNDPRI03).
SCIUNIGE*176	<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N	2014	2006-12-04: vicinity of planned community with scattered depressions, live oaks, and pines. Open golf course with tree lined fairways (U06FUL01FLUS). Additional altered sandhill habitat to the west of Southwood development.	2006-12-04: Fulkerson estimated 20 individuals in vicinity, but was unsure (U06FUL01FLUS). Later incidental observations from trails and roadways in the vicinity.



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SCIUNIGE*210	<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N	2016-04-25	2006-06-30: high quality sandhill (U07GIL01FLUS).	Multiple observations over many years within the Munson Sandhill portion of the Apalachicola National Forest.
SELOMAND*10	<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G4	S2S4	N	N	1956-07-29	1956-07-29: No description given (B99GAL01FLUS).	1956-07-29: 2 specimens were collected by light and deposited in CNC and CUIC (B99GAL01FLUS).
SOMAPROV*2	<i>Somatochlora provocans</i>	Treetop Emerald	G4	S3	N	N	2002-05-01	2002-05-01: No description given (U09DEP01FLUS).	2002-05-01: This species was documented by Florida Department of Environmental Protection agency staff at two localities (U09DEP01FLUS).



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UPLAFORE*161	Upland hardwood forest		G5	S3	N	N	1999-10-21	1999-10-21: THE SLOPE FOREST OCCURS ON A NARROW SLOPE TRANSITIONAL FROM XERIC, FIRE-SUPPRESSED AND TIMBERED UPLANDS TO OCHLOCKONEE RIVER FLOODPLAIN. SHALLOWER SLOPES TO THE EAST AND WEST ARE THICKLY OVERGROWN WITH LAUREL OAK AND OTHER "WEEDY" TREE SPECIES (PNDCHA05FLUS).	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Slope forest EO number 87 (see U10FNA01FLUS for updated community descriptions). 1999-10-21: FOREST OCCURS ON A NARRROW, STEEP SLOPE ABOVE THE OCHLOCKONEE RIVER FLOODPLAIN. IT HAS BEEN LOGGED IN THE PAST, PERHAPS SELECTIVELY SINCE THERE ARE A FEW VERY LARGE TREES E.G. BEECH, SPRUCE PINE, LIVE OAK, AND BASSWOOD, LEFT IN THE CANOPY. OTHER CANOPY SPECIES INCLUDE SWAMP CHESTNUT OAK, WHITE OAK, SWEET GUM, BLACK CHERRY, AND LARGE-LOWERED MAGNOLIA. THE UNDERSTORY IS FAIRLY OPEN WITH SCATTERED SWEETLEAF, SMALL-FLOWERED PAWPAW, HOP HORNBEAM, AMERICAN HOLLY, BLUE PALM, DOGWOOD, AND SILVERBELL. IN SOME AREAS, THE DOMINANT UNDERSTORY SPECIES IS THE STATE-LISTED SWEETSHRUB (CALYCANTHUS FLORIDUS), WHICH FORMS PATCHES OR CLONES ON BOTH SIDES OF THE POINT. THE HERB LAYER IS FAIRLY RICH, ESPECIALLY CONSIDERING THE FALL SURVEY TIMING, CONTAINING POLYSTICHUM ACROSTICHOIDES, ASPLENium PLATYNEURON, SPIGELIA MARILANDICA, AND CAREX SPP. THERE IS SEEPAGE AT THE BOTTOM OF THE SLOPE ON THE NW SIDE OF THE POINT. THE TRANSITIONS TO BOTH FIRE-SUPPRESSED UPLANDS AND FLOODPLAIN AT THE BOTTOM OF THE SLOPE ARE VERY ABRUPT (PNDCHA05FLUS).
UVULFLOR*12	<i>Uvularia floridana</i>	Florida merrybells	G3	S1	N	E	2006-04-06	2006-04-06: seepage area in upland hardwood forest. Growing with Lonicera japonica- herbicide use not recommended (F06FNA14FLUS).	2006-04-06: more than 1000 plants in leaf and flower (F06FNA14FLUS).



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XYRILONG*3	<i>Xyris longisepala</i>	karst pond xyris	G2G3	S2S3	N	E	1987-07-31	No general description given	No EO data given



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Documented					
<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)
<i>Amblyscirtes alternata</i>	Dusky Roadside-Skipper	G2G3	S2	N	N
<i>Calycanthus floridus</i>	sweet-shrub	G5	S2	N	E
<i>Haliaeetus leucocephalus</i>	Bald Eagle		S3	N	N
<i>Hesperia attalus slossonae</i>	Seminole Skipper	G3G4T3	S3	N	N
<i>Lithobates capito</i>	Gopher Frog	G3	S3	N	N
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	G3G4	S3	N	SSC
<i>Magnolia pyramidata</i>	pyramid magnolia	G4	S3	N	E
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	E	FE
<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST
<i>Pityopsis flexuosa</i>	zigzag silkgrass	G3	S3	N	E
<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	G5T3	S3	N	N
<i>Quadrula infucata</i>	Sculptured Pigtoe	G3	S2S3	N	N
<i>Rhexia salicifolia</i>	Panhandle meadowbeauty	G2	S2	N	T
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Somatochlora provocans</i>	Treetop Emerald	G4	S3	N	N
Upland hardwood forest		G5	S3	N	N
<i>Uvularia floridana</i>	Florida merrybells	G3	S1	N	E
Documented-Historic					
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	C	N
Likely					
<i>Apalone spinifera</i>	Spiny Softshell	G5	S3	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3Q	S3	T	FT
<i>Elliptio purpurella</i>	Inflated Spike	G2	S2	N	N
<i>Elliptioideus sloatianus</i>	Purple Bankclimber		S1S2	T	FT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
<i>Graptemys barbouri</i>	Barbour's Map Turtle	G2	S2	N	ST
<i>Hamiota subangulata</i>	Shiny-rayed Pocketbook		S1S2	E	FE
<i>Medionidus simpsonianus</i>	Ochlockonee Moccasinshell	G1	S1	E	FE
Mesic flatwoods		G4	S4	N	N
<i>Mustela frenata olivacea</i>	Southeastern Weasel	G5T4	S3?	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	T	FT
<i>Pandion haliaetus</i>	Osprey	G5	S3S4	N	SSC*
<i>Pleurobema pyriforme</i>	Oval Pigtoe	G2	S1S2	E	FE
Sandhill		G3	S2	N	N
Sandhill upland lake			S2	N	N
Scrub		G2	S2	N	N
Upland pine		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	N
Potential					
<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1S2	T	FT
<i>Ameiurus serracanthus</i>	Spotted Bullhead	G3	S3	N	N
<i>Amphiuma pholeter</i>	One-toed Amphiuma		S3	N	N
<i>Andropogon arctatus</i>	pinewoods bluestem		S3	N	T
<i>Asclepias viridula</i>	southern milkweed	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzentii's spleenwort		S1	N	N

Definitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.



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<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Baptisia megacarpa</i>	Apalachicola wild indigo	G2	S1	N	E
<i>Bolbocerosoma hamatum</i>	Bicolored Burrowing Scarab Beetle	G3G4	S3	N	N
<i>Brickellia cordifolia</i>	Flyr's brickell-bush	G3	S2	N	E
<i>Calamintha dentata</i>	toothed savory		S3	N	T
<i>Carex baltzellii</i>	Baltzell's sedge		S3	N	T
<i>Carex chapmannii</i>	Chapman's sedge		S3	N	T
<i>Conradina glabra</i>	Apalachicola rosemary	G1	S1	E	E
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Croomia pauciflora</i>	croomia	G3	S2	N	E
<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G4	S3	N	N
<i>Cyprinella leedsi</i>	Bannerfin Shiner		S3	N	N
<i>Desmognathus apalachicolae</i>	Apalachicola Dusky Salamander		S2S3	N	N
<i>Eucanthus alutaceus</i>	Mat Red Globe Scarab Beetle	G2G3	S1S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Gentiana pennelliana</i>	wiregrass gentian	G3	S3	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Leitneria floridana</i>	corkwood	G3	S3	N	T
<i>Linum westii</i>	West's flax	G1	S1	N	E
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Lythrum curtissii</i>	Curtiss' loosestrife	G1	S1	N	E
<i>Macranthera flammea</i>	hummingbird flower	G3	S2	N	E
<i>Magnolia ashei</i>	Ashe's magnolia	G2	S2	N	E
<i>Matelea alabamensis</i>	Alabama spiny-pod		S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod		S2	N	E
<i>Micropterus notius</i>	Suwannee Bass	G3	S3	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Neovison vison halilimnetes</i>	Gulf Salt Marsh Mink	G5T3	S3	N	N
<i>Nolina atopocarpa</i>	Florida beargrass	G3	S3	N	T
<i>Onthophagus polyphemus polyphemus</i>	Punctate Gopher Tortoise Onthophagus	G2G3T2T3	S2	N	N
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Phyllanthus liebmannianus ssp. platylepis</i>	pinewoods dainties	G4T2	S2	N	E
<i>Physostegia godfreyi</i>	Apalachicola dragon-head	G3	S3	N	T
<i>Pinguicula primuliflora</i>	primrose-flowered butterwort	G3G4	S3	N	E
<i>Platanthera integra</i>	yellow fringeless orchid		S3	N	E
<i>Pycnanthemum floridanum</i>	Florida mountain-mint	G3	S3	N	T
<i>Rhexia parviflora</i>	small-flowered meadowbeauty	G2	S2	N	E
<i>Rhododendron austrinum</i>	Florida flame azalea	G3	S3	N	E
<i>Rhododendron chapmanii</i>	Chapman's rhododendron	G1	S1	E	E
<i>Ruellia noctiflora</i>	nightflowering wild petunia	G3?	S2	N	E
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Schisandra glabra</i>	bay star-vine	G3	S2	N	E
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC
<i>Stachydeoma graveolens</i>	mock pennyroyal	G2G3	S2S3	N	E
<i>Taxus floridana</i>	Florida yew	G2	S2	N	E
<i>Tiedemannia filiformis ssp. greenmanii</i>	giant water cowbane	G3	S3	N	E
<i>Torreya taxifolia</i>	Florida torreya	G1	S1	E	E
<i>Trillium lancifolium</i>	narrow-leaved trillium	G3	S2	N	E
<i>Xyris longisepala</i>	karst pond xyris	G2G3	S2S3	N	E
<i>Xyris scabrifolia</i>	Harper's yellow-eyed grass	G3	S3	N	T

Definitions: Documented - Rare species and natural communities documented on or near this site.
 Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
 Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
 Potential - This site lies within the known or predicted range of the species listed.

Florida Natural Areas Inventory

Aggregated Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
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Definitions: Documented - Rare species and natural communities documented on or near this site.
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

- G1** = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- G2** = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3** = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- G4** = Apparently secure globally (may be rare in parts of range).
- G5** = Demonstrably secure globally.
- GH** = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
- GX** = Believed to be extinct throughout range.
- GXC** = Extirpated from the wild but still known from captivity or cultivation.
- G#?** = Tentative rank (e.g., G2?).
- G#G#** = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
- G#T#** = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
- G#Q** = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
- G#T#Q** = Same as above, but validity as subspecies or variety is questioned.
- GU** = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
- GNA** = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- GNR** = Element not yet ranked (temporary).
- GNRTNR** = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

- S1** = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- S2** = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- S3** = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- S4** = Apparently secure in Florida (may be rare in parts of range).
- S5** = Demonstrably secure in Florida.
- SH** = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
- SX** = Believed to be extirpated throughout Florida.
- SU** = Unrankable; due to a lack of information no rank or range can be assigned.
- SNA** = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- SNR** = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.

E = Endangered: species in danger of extinction throughout all or a significant portion of its range.

E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas

E, PDL = Species currently listed endangered but has been proposed for delisting.

E, PT = Species currently listed endangered but has been proposed for listing as threatened.

E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.

T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.

PE = Species proposed for listing as endangered

PS = Partial status: some but not all of the species' infraspecific taxa have federal

PT = Species proposed for listing as threatened

SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.

SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service

FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service

FXN = Federal listed as an experimental population in Florida

FT(S/A) = Federal Threatened due to similarity of appearance

ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.

SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for *Pandion haliaetus* (Osprey) indicates that this status applies in Monroe county only.)

N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: <http://www.doacs.state.fl.us/pi/>.

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.

T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.

N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: <http://www.natureserve.org/explorer/eorankguide.htm>

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

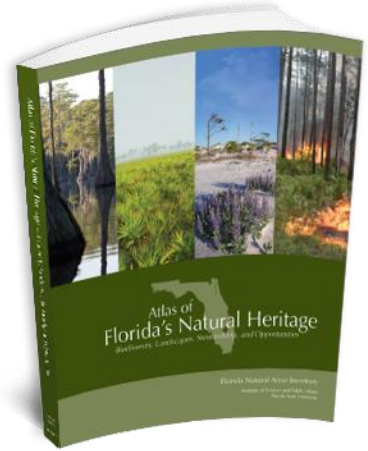
The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).



Atlas of Florida's Natural Heritage

Biodiversity, Landscapes, Stewardship, and Opportunities

The Florida Natural Areas Inventory is pleased to announce the publication of the ***Atlas of Florida's Natural Heritage: Biodiversity, Landscapes, Stewardship, and Opportunities***. This high-quality, full-color *Atlas* is sure to become a standard reference for anyone involved in the conservation, management, study, or enjoyment of Florida's rich natural resources. We hope the *Atlas* will inspire, educate, and raise awareness of and interest in biodiversity and conservation issues.



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